and decreases in severity of OM earlier (from 1 to 3 days) using the MTS than their physicians who were using the 3 OM clinical scales. The self-reported OM pain score was worst at day 5 for MTS, compared to day 7 for the 3 clinical scales. Correlation of the MTS/MTS-AL scores at days 7 and 14 was strongest with the WHO scale (0.25–0.55). MTS/MTS-AL correlation was next strongest with the WCCNR scale (0.27–0.49), followed by the RTOG scale (0.29–0.44). Similarly, the changes in mean scores were significantly correlated between MTS (0.29) or 4 of 5 MTS-AL (0.28–0.33) and the WHO scale. **Conclusion:** The patient self-reported severity and impact of OM measure correlated well with the clinical measures, especially with the WHO scale. In addition, the patient self-reported measure can consistently detect changes (both increases and decreases) in the severity of OM earlier than can any of the OM clinical measures.

**Table 1.** *Correlation of MTS Questions With WHO Clinical OM Scale*

| | Mean Score Correlation Coefficient (r) | | |
|---|---|---|---|
| MTS Questions | Day 7 | Day 14 | Change in Mean Score (Day 7 to Day 14) |
| MTS (mouth and throat soreness) | 0.46 (n = 174) | 0.49 (n = 113) | 0.29 (n = 100) |
| MTS-S (swallowing) | 0.50 (n = 174) | 0.38 (n = 113) | 0.29 (n = 100) |
| MTS-D (drinking) | 0.54 (n = 173) | 0.43 (n = 113) | 0.30 (n = 99) |
| MTS-E (eating) | 0.55 (n = 173) | 0.41 (n = 113) | 0.33 (n = 99) |
| MTS-T (talking) | 0.45 (n = 172) | 0.35 (n = 113) | 0.28 (n = 99) |
| MTS-SL (sleeping) | 0.30 (n = 170) | 0.25 (n = 113) | 0.08 (n = 97) |

NOTE: P-values are Day 7: $p \leq 0.001$; Day 14: $p \leq 0.008$; Change in mean score: $p \leq 0.005$ (for MTS, MTS-S, MTS-D, MTS-E, MTS-T); Change in mean score: $p = 0.428$ (for MTS-SL only).

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### LONG-TERM QUALITY OF LIFE IS NOT AFFECTED BY AGE IN AML/MDS PATIENTS AFTER ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION

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**Objective:** Allogeneic hematopoietic stem cell transplantation (alloHSCT) can have significant impact on patients' quality of life (QOL) in the long term. We seek to describe QOL of long-term survivors with AML/MDS and compare QOL as a function of age at transplant. **Methods:** Between January 1976 and September 2001, 544 adult AML/MDS patients received alloHSCT at our institution. Long-term survivorship was defined as survival in remission beyond 2 years post-HSCT because failure rate stabilized in the third year. A total of 129 (24%) patients in remission for at least 2 years were eligible. QOL was assessed with Functional Assessment of Cancer Therapy-Bone Marrow Transplant (FACT-BMT) questionnaire measuring physical, functional, social/family, and emotional well-being (PWB, FWB, SFWB, EWB), including doctor–patient relationship (RWD). An additional concern (AC) subscale also asked questions related to bone marrow transplantation. Response rate was 68%. A higher score on the FACT-BMT reflected a higher QOL. Demographic and clinical data were collected from medical records and clinical database. **Results:** The median patient age at transplantation was 38.44 years (range, 18.54–68.08 years). The study group comprised 47 males and 35 females, 70 with a diagnosis of AML and 12 with a diagnosis of MDS. Conditioning was with reduced intensity regimen (RI) in 29 cases and myeloablative regimen (MA) in 53 cases. The stem cell source was the bone marrow in 52 cases and peripheral blood in 30 cases. Disease status at HSCT was complete remission in 40 cases, relapsed in 37 cases, and untreated disease in 5 cases. Median follow-up time was 4.53 years (range, 2.0–21.1 years). There were no significant differences between the older and younger patients (above and below the median age at transplant) on the PWB, SFWB, EWB, FWB, and RWD subscales. On the AC subscale, older patients had higher QOL scores than younger patients (mean score, 37.97 vs 33.25, respectively; $P = .005$). There were no significant differences in QOL scores between patients receiving RI and MA regimen in all but the AC subscale where RI group had a higher score (39.00 vs 33.34, respectively; $P = .001$). Acute graft-versus-host disease (GVHD) did not impact long-term QOL, but lack of chronic GVHD was associated with better QOL score in the PWB, EWB, FWB, and AC subscales (PWB, 25.04 vs 20.62, $P = .005$; EWB, 21.77 vs 18.98, $P = .003$; FWB, 22.91 vs 18.00, $P = .008$; AC, 40.00 vs 34.28, $P = .002$). **Conclusion:** Older age at transplantation did not affect the QOL in long-term survivors with AML/MDS after alloHSCT.

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### RISK FACTORS FOR CHRONIC KIDNEY DISEASE (CKD) AFTER HEMATOPOIETIC CELL TRANSPLANTATION (HCT)

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CKD has been reported in 20% of adult and 62% of children in the years following HCT, usually becoming apparent 6–12 months after transplant. Mortality rates are higher in patients with CKD in this setting than in transplantation recipients who retain normal renal function. Although there are numerous case series describing CKD in the setting of HCT, they involve relatively small cohorts of patients. We examined the frequency of CKD and risk factors for its development in a large cohort of patients transplanted over a 10-year time span. **Methods:** We reviewed data from consecutive patients who received their first transplantation between 1991 and 2002 and who had at least 2 serum creatinine values between days 100 and 540 posttransplantation, and at least 1 measurement within 3 months of day 365 or death, whichever came first. CKD was defined as a serum creatinine level $\geq$1.5 mg/dL in men, $\geq$1.3 mg/dL in women and $\geq$ 0.9 mg/dL in children at 2 or more times during day 100–540 posttransplantation. Putative risk factors analyzed included demographic characteristics, type of transplantation, conditioning regimen (including irradiation) and comorbidities such as acute graft-versus-host disease (GVHD) and acute renal failure (ARF), defined as doubling of baseline creatinine before day 60. Using univariable and multivariable Cox regression models, hazard ratios for associations of risk factors with CKD were estimated. **Results:** A total of 1593 patients, with 279 cases of CKD (17.5%), made up the study sample. The 279 cases of CKD occurred at a median of 108 days posttransplantation, with a range of 100–517 days. In a multivariable Cox regression model, adjusted for age, sex, diagnosis, donor and transplantation type, total body irradiation (TBI), cyclosporine prophylaxis, and acute and chronic GVHD, ARF was a significant predictor of CKD (hazard rate = 2.0, 95% comfodence interval = 1.6–2.6). Age, mean total serum bilirubin through day 100, grades 3 and 4 acute GVHD, and chronic GVHD were also significantly associated with CKD after adjusting for all other factors. TBI and donor and transplantation type were not associated with an increased risk of CKD in the multivariable model. **Conclusions:** The prevalence of CKD to 1 year posttransplantation is 17.5%. ARF, jaundice, severe acute GVHD, and chronic GVHD are associated with an increased risk of CKD. Those patients with ARF who survive beyond day 100 should be considered for intervention trials as they are at highest risk.